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Lorri W. Cooper
JONES DAY
901 Lakeside Avenue
Cleveland, OH 44114

EXAMINER

RIGGLEMAN, JASON PAUL

ART UNIT	PAPER NUMBER
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1746

MAIL DATE	DELIVERY MODE
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07/26/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/749,415

Applicant(s)

RAY, R. KEVIN

Examiner

Jason P. Riggleman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 6, 11, 15-25, 27, 28, 30-32 and 35 is/are rejected.
- 7) ☒ Claim(s) 4, 7-10, 27, 29, 33-34, 36-38 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's reply filed on 2/8/2007 is acknowledged. Current pending claims are 1-38. Claims 1-2, 9, 12-13, 16, 19, 21, and 21-38 are amended. Claims 39-42 have been cancelled.
2. Applicant's amendments, filed 2/8/2007, have been fully considered and are persuasive in regards to drawing objections. These objections are withdrawn. The 112 second paragraph rejection of claims 9 and 16 are withdrawn in view of the amendments.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3, 5, 11, and 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gregory (US Patent No. 6164496) in view of Teague (US Patent No. 5383605).
5. Gregory teaches the use of a cleaning apparatus with an injector which has a movable external member (outer assembly 24) that partially surrounds the nozzle 38. The injector has an internal 123 and external 112 passageway, and the movable external member 24 is positioned partly around the nozzle 38 and the external passageway 112. The external member 24 has a valved chemical inlet 92 (second

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venture) positioned downstream from the nozzle 38. The injector is configured to spray at least one of a fluid in the low-pressure range and a fluid in a high-pressure range (Column 1, Lines 25-57)(Column 2, Lines 59-62). Gregory also teaches a chemical supply (second chemical housing) (in reservoir 112) connected to the second chemical inlet 92. The piece 34 may be considered the spray lance. The nozzle tip (valve stem 120) has a flow restricting portion.

6. Gregory does not teach a first chemical inlet for the pump; a motor associated with the pump; and a spray gun with a trigger and handle; however, Teague teaches a power-spraying device with a pump 58 that has a plurality of solenoid-controlled fluid inlets 63, 64, and 65. The fluid inlets are fed from three chemical tanks 68, 70, and 72, respectively, into fluid passageway 67 and then to the pump 58. A spray wand 40 is connected to the nozzle housing 4 that is connected by hose 44 to the pump 58. A motor 56 is associated with the pump 58. The spray wand 40 has a handle 70 and trigger 78, Fig. 2) for controlling fluid flow (Columns 3-4, Lines 10-68, Lines 0-38). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Gregory with Teague to inject detergent downstream of the pump to create a power-spraying device that effectively mixes detergent with water for cleaning.

7. In regards to claim 15, Gregory and Teague do not specify the use of a non-corrosive external member and metallic nozzle; however, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Gregory and Teague to create a spraying apparatus with nozzles/external members resistant to corrosion yet capable of withstanding high-pressure fluid flow.

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8. In regards to claim 16, Gregory and Teague, do not teach a second venturi coupled to the pump of the first chemical element; however, the use of a Venturi to inject chemicals is common in the art and it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Gregory as modified by Teague to create a Venturi fed chemical inlet to achieve the expected result.

9. In regards to claim 18, Gregory does not teach the specific pressure values for the high and low pressure ranges; however, it has been held that it would have been obvious to one of ordinary skill in the art at the time of the invention have determined the optimum value for a cause effective variable through routine experimentation (*In re Woodruff*, 16 USPQ 2d 1934, 1936 (Fed. Cir. 1990). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Gregory such as to use the optimum pressure values for washing a car.

10. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gregory (US Patent No. 6164496) and Teague (US Patent No. 5383605), as applied to claims 1-3, above, and further in view of Kranzle (US Patent No. 5405086).

11. Gregory and Teague do not teach a cart for housing the chemical supply unit and the pump; however, Kranzle teaches the use of a cart consisting of a housing 2 with wheels 5 for supporting a chemical supply unit 12 and pump 7. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Teague and Gregory with Kranzle to create a mobile pressure-cleaning device.

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12. Claims 19-26, 28, 30-32, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gregory (US Patent No. 6164496) in view of Teague (US Patent No. 5383605) and Jones (US Patent No. 6571807).

13. Gregory teaches the use of a cleaning apparatus with an injector which has a movable external member (outer assembly 24) that partially surrounds the nozzle 38. The injector has an internal 123 and external 112 passageway, and the movable external member 24 is positioned partly around the nozzle 38 and the external passageway 112. The external member 24 has a valved chemical inlet 92 (second venture) positioned downstream from the nozzle 38. The injector is configured to spray at least one of a fluid in the low-pressure range and a fluid in a high-pressure range (Column 1, Lines 25-57)(Column 2, Lines 59-62). Gregory also teaches a chemical supply (second chemical housing) (in reservoir 112) connected to the second chemical inlet 92. The piece 34 may be considered the spray lance. The nozzle tip (valve stem 120) has a flow restricting portion.

14. Gregory does not teach a first chemical inlet for the pump; a motor associated with the pump; and a spray gun with a trigger and handle; however, Teague teaches a power-spraying device with a pump 58 that has a plurality of solenoid-controlled fluid inlets 63, 64, and 65. The fluid inlets are fed from three chemical tanks 68, 70, and 72, respectively, into fluid passageway 67 and then to the pump 58. A spray wand 40 is connected to the nozzle housing 4 that is connected by hose 44 to the pump 58. A motor 56 is associated with the pump 58. The spray wand 40 has a handle 70 and trigger 78, Fig. 2) for controlling fluid flow (Columns 3-4, Lines 10-68, Lines 0-38). It

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would have been obvious to one of ordinary skill in the art at the time of the invention to modify Gregory with Teague to inject detergent downstream of the pump to create a power-spraying device that effectively mixes detergent with water for cleaning.

15. Gregory modified by Teague does not teach specific values for the high and low pressure range of the sprayer; however, Jones teaches a variable speed pump with a low-pressure stage, to 200 psi, used for applying soap to the vehicle and a high-pressure stage, to 1250 psi, used for rinsing the vehicle (Columns 3 and 6, Lines 17-29 and 0-8). It would have been obvious to one of ordinary skill in the art at the time of invention to modify Gregory with the pressure stages of Jones to create a sprayer with specific high and low pressure capabilities. Gregory teaches two modes of operation whereby the second chemical is introduced at a low and high pressure. Gregory modified by Teague modified by Jones teaches a plurality of modes by which the first chemical may be added; therefore, at least three modes of operation are inherently taught by the modification.

16. In regards to claim 24, 26-28, 30-31, and 35, Gregory and Teague do not specify the use of a non-corrosive external member and metallic nozzle; however, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Gregory and Teague to create a spraying apparatus with nozzles/external members resistant to corrosion yet capable of withstanding high-pressure fluid flow.

17. In regards to claim 32, Gregory and Teague, do not teach a second venturi coupled to the pump of the first chemical element; however, the use of a Venturi to inject chemicals is common in the art and it would have been obvious to one of ordinary

skill in the art at the time of the invention to modify Gregory as modified by Teague to create a Venturi fed chemical inlet to achieve the expected result.

18. In regards to claim 23, Gregory does not teach the specific pressure values for the high and low pressure ranges; however, it has been held that it would have been obvious to one of ordinary skill in the art at the time of the invention have determined the optimum value for a cause effective variable through routine experimentation (*In re Woodruff*, 16 USPQ 2d 1934, 1936 (Fed. Cir. 1990). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Gregory such as to use the optimum pressure values for washing a car.

Response to Arguments

19. Applicant's arguments with respect to claims 1-38 have been considered but are moot in view of the new ground(s) of rejection.

Allowable Subject Matter

20. Claims 12-14 allowed.

21. Claims 4, 7-10, 27, 29, 33-34, and 36-38 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

22. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason P. Riggelman whose telephone number is 571-272-5935. The examiner can normally be reached on M-F, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on 571-272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jason P Riggleman
Examiner
Art Unit 1746

JPR



MICHAEL BARR
SUPERVISORY PATENT EXAMINER